

REMARKS

This application has been reviewed in light of the Office Action dated April 7, 2005. Claims 1-23 are pending in this application, with Claims 1, 12, and 23 being independent. Claims 1, 9, and 12-23 have been amended to define more clearly what Applicant regards as his invention. No change in scope is either intended or believed to be effected by at least the changes made to Claims 9 and 13-22. Favorable reconsideration is requested.

Claim 20 was objected to for reciting "sep" instead of --step--, and Applicant has corrected this informality. Accordingly, withdrawal of the objection to Claim 20 is respectfully requested.

Claims 1, 2, 4, 6, 11-13, 15, 17, 22, and 23 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 6,094,277 (Toyoda) in view of U.S. Patent 6,424,996 (Killcommons et al.), and further in view of U.S. Patent 6,101,244 (Okada); Claims 3, 8-10, 14, and 19-21, as being obvious from Toyoda in view of Killcommons et al. and Okada, and further in view of U.S. Patent 6,868,183 (Kodaira et al.); Claims 5 and 16, as being obvious from Toyoda in view of Killcommons et al. and Okada, and further in view of JP 411196218A (Kaneya); and Claims 7 and 18, as being obvious from Toyoda in view of Killcommons et al. and Okada, and further in view of U.S. Patent 6,243,174 (Fukasawa).

Claim 1 is directed to a communication apparatus including connecting means, input means, transmitting means, receiving means, analyzing means, converting means, and control means. The connecting means connects the communication apparatus

to a communication network containing an electronic mail exchange device. The input means inputs image data representing an image, and the transmitting means transmits an electronic mail, to which the inputted image data is attached, via the connecting means. The receiving means receives an electronic mail for notifying an error via the connecting means, and the analyzing means analyzes the received electronic mail for notifying the error. The converting means converts a capacity of the image data, inputted by the input means, into a smaller capacity according to an analysis result obtained by the analyzing means. The control means automatically carries out a controlling operation so as to retransmit the electronic mail, to which the image data with the capacity thereof converted by the converting means is attached, by the transmitting means, in response to the receiving means receiving the electronic mail for notifying the error.

Notably, in the communication apparatus of Claim 1, control means automatically carries out a controlling operation so as to retransmit an electronic mail which has been transmitted by transmitting means and to which image data with a capacity thereof converted by converting means into a smaller capacity is attached, by the transmitting means, in response to receiving means receiving an electronic mail for notifying an error.

By virtue of the features of Claim 1, if an electronic mail is received that notifies an occurrence of an error in the transmission of an electronic mail attached with image data due to the transmitted electronic mail (the image data) having an excessive data

size, the electronic mail is automatically retransmitted to a receiving side<sup>1/</sup> after the image data attached to the transmitted electronic mail has been converted into a smaller capacity. This makes it possible for the communication apparatus to provide the receiving side with the image data through electronic mail without intervention from a user.

Toyoda, as understood by Applicant, relates to an internet facsimile apparatus and e-mail communication method. Fig. 2 illustrates an outline of hardware making up an Internet FAX, which comprises CPU 20 that controls the operation of the entire apparatus, FAX 21 that performs FAX transmission/reception according to a normal facsimile protocol, printer 22, scanner 23 that scans a document and incorporates image information of the document, LAN interface section 24 that connects with the Internet, and ROM 25 that stores programs, etc. to operate as a normal facsimile. It further incorporates a RAM comprising program area 26 that stores a program to operate as an Internet FAX, work area 27, and data area 28. (See column 3, lines, 14-25.)

Data created or read in each of terminals connected to the Internet are transmitted to a target terminal via a mail server (see column 3, lines 33-35). After being converted into a file in a TIFF-F file format, image information is attached to E-mail (see column 3, lines 55-56) . Header/IFD analysis section 5 decides whether there are any TIFF-F files from mail data stored in a data area of memory 4 (S1). When there is no TIFF-F file, Header/IFD analysis section decides whether any text is included in the beginning of the E-mail (S2). When there is no text, header/IFD analysis section 5 notifies

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<sup>1/</sup>The receiving side may be an apparatus on the other end of a communication network to which the communication apparatus is connected.

a type of error message corresponding to the case where there is neither a TIFF-F file nor text, to message ID/text extraction section 6. (See column 4, lines 16-23.)

Killcommons et al., as understood by Applicant, relates to a medical network system and a method for transfer of information. A processing unit 24 (see Fig. 2A) provides a mechanism to allow for the compression of data by a compression component 26 (see column 8, lines 11-13). To prepare a package for e-mailing, the compression component 26 of the processing unit 24 may further compress the package into a size that is optimal for e-mailing (see column 9, lines 50-52).

Okada, as understood by Applicant, relates to an electronic mail-capable communication terminal device and an electronic mail communication method. A facsimile machine prints out or displays a message such as "Subject: XXX resent" if image data is retransmitted (see column 8, lines 36-38).

In contradistinction to the apparatus of Claim 1, Toyoda discusses an Internet facsimile that transmits an error notification e-mail when an electronic mail attached with image data cannot be processed appropriately. The Internet facsimile discussed in Toyoda may have a function of error-notification mail transmission. However, in the apparatus of Claim 1 such function is achieved by the receiving side. Nothing in Toyoda would teach or suggest retransmission of the electronic mail attached with image data in response to a reception of an electronic mail for notifying the error, as recited in Claim 1.

Killcommons discusses compressing the size of medical data that is to be transmitted through e-mail into a size which is optimal for e-mailing; thus, the data

compression is performed prior to the e-mail transmission of the medical data.

Killcommons does not teach or suggest retransmission of the medical data in response to an error-notification e-mail. Killcommons does not teach or suggest automatically carrying out the data compression in response to a reception of an electronic mail for notifying an error.

It should be noted that an electronic mail transmission error can occur when the size of the electronic mail to be transmitted is too large as compared not only to the mail processing ability of the receiving side but also to that of electronic mail exchange devices through which the electronic mail is transmitted. Thus, an error may occur in transmitting an electronic mail of a certain size depending on electronic mail exchange devices through which the electronic mail is transmitted.

Considering the possibility that the electronic mail may be transmitted passing through many kinds of electronic mail exchange devices, the apparatus of the invention to which Claim 1 relates first transmits the electronic mail in the maximum possible size as long as no transmission error occurs, in order to realize high-quality image data transmission. Upon occurrence of a transmission error, i.e., in response to a reception of an error-notification electronic mail, the apparatus of Claim 1 converts a capacity of image data attached to the electronic mail which has been transmitted into a smaller capacity prior to retransmission of the electronic mail.

Nothing in Toyoda, Killcommons et al., or Okada, whether considered separately or in any permissible combination (if any) would teach or suggest automatically carrying out a controlling operation so as to retransmit an electronic mail which has been

transmitted by transmitting means and to which image data with a capacity thereof converted into a smaller capacity is attached, by the transmitting means, in response to receiving means receiving an electronic mail for notifying an error, as recited in Claim 1.

Accordingly, Claim 1 is believed to be patentable over Toyoda, Killcommons et al., and Okada, whether considered separately or in any permissible combination (if any) .

Independent Claims 12 and 23 recite features similar in many relevant respects to those discussed above with respect to Claim 1 and therefore are also believed to be patentable over Toyoda, Killcommons et al., and Okada, for at least the reasons discussed above.

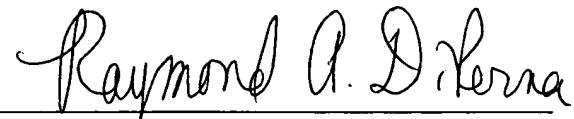
A review of the other art of record, including Kodaira et al., Kaneya, and Fukasawa, has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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